

Notice of Allowability

Application No.

10/810,419

Examiner

PHUC T. DANG

Applicant(s)

ADAM ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on August 4, 2006.
2. ☒ The allowed claim(s) is/are 1-5 and 7-17 (renumbered as in new claims 1-16).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

PHUC T DANG
Primary Examiner
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DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on August 4, 2006.

Claim 1 has been amended.

Claim 6 has been canceled.

Claims 1-5 and 7-25 are pending in the application.

Examiner's Amendment

2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Authorization for this Examiner's Amendment was considered as follows:

3. In claim 1, line 3, "... a semiconductor substrate ..." has been amended to -- a semiconductor substrate ... --.

In claim 10, line 13, "... interconnect said first, second ..." has been amended to -- ... interconnect said first, second ... --.

4. Claims 18-25 have been canceled.

Claims 1-5 and 7-17 are pending in the present application at this time for examination.

Claims 1-5 and 7-17 are renumbered as in new claims 1-16.

Examiner's Statement of Reasons for Allowance

5. Claims 1-5 and 7-17 are allowed.

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6. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a method for fabricating a tri-gate semiconductor device, comprising forming a low voltage core gate dielectric layer over the low voltage core region, including forming an intermediate core gate dielectric layer over an intermediate core region; wherein forming the low voltage core gate dielectric layer and the intermediate core gate dielectric layer is conducted in the presence of an environment containing nitrogen, in combination with the rest of the limitations of claim 1.

With respect to claim 10, the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a method for manufacturing a tri-gate integrated circuit, comprising a step of forming interconnects extending through dielectric layers located over first, second, and third transistor gates to interconnect the first, second and third transistor gates to form an operative tri-gate integrated circuit, in combination with the rest of the limitations of claim 10.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance".

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is (571) 272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.

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9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey O Minsun can be reached on (571) 272-1835. The fax phone numbers for the organization

where this application or proceeding is assigned are 571-273-8300 for regular communications and After Final communications.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Phuc T. Dang

A handwritten signature in black ink, appearing to read 'Phuc T. Dang', with a stylized, flowing script.

Primary Examiner

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